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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,819	03/04/2004	Tsung-Neng Liao	4299-0122P	3661

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EXAMINER

TRAN, THAO T

ART UNIT PAPER NUMBER

1711

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,819

Applicant(s)

LIAO ET AL.

Examiner

Thao T. Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-15 is/are pending in the application.
4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2 and 4-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments filed 3/1/2005.
2. Claims 1-2, 4-15 are currently pending in this application. Claim 3 has been canceled. Claims 8-15 have been newly added. Claims 1-2, 4-6 have been amended.

Election/Restrictions

3. Newly submitted claims 9-15 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 9-15 are directed to a backlight unit comprising a diffuser and a lamp, whereas original claims are directed to a substrate.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9-15 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-4, 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Stein et al. (US Pat. 6,322,860).

Stein teaches a plastic substrate 1, coated on both sides with crosslinked coatings 2, barrier coatings 3 (insulating layers) (see Figs. 2-3; col. 2, ln. 26-33). The substrate can be polycarbonate (see col. 1, ln. 53-55); the crosslinked coatings can be polymethylmethacrylate (see col. 7, ln. 7); the barrier coatings can be a cyclic olefin copolymer (see col. 10; ln. 60-62). Stein further teaches the barrier coating to be approximately 5 microns (see col. 15, ln. 21-22). Although Stein does not specifically teach the substrate to have edge sides coated with the barrier coatings, since Stein teaches the same substrate to be used in optical devices, as disclosed by the present specification, Stein's substrate would inherently have edge sides covered with the barrier coatings because the coatings are applied by dipping the substrate into the solution (see Examples).

Moreover, with respect to how the insulating layers are formed on the substrate, it has been within the skill in the art that process limitations would have no significant patentable weight in an article claim.

Since the barrier coating and the substrate in Stein are the same as the insulating layers and the substrate member in the presently claims, the barrier coatings of the reference would inherently keep water in the substrate as the substrate is heated.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stein as applied to claim 1 above.

Stein is as set forth in claim 1 above and incorporated herein.

Stein does not teach the barrier coatings to be between 50-200 microns. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that thickness of a part would have been determined by routine experimentation depending upon user's preference and intended use. A barrier coating with more thickness would have a better barrier function but too thick a barrier coating would increase haziness, and a barrier with less thickness would enhance transparency but too thin a barrier coating would increase brittleness.

Response to Arguments

8. Applicant's arguments filed 3/1/2005 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that the reference of Stein does not teach the barrier layers keeping water in the substrate from escaping. However, as pointed out in paragraph 5 above, since the barrier layers and the substrate taught by Stein are the same as those in the presently claimed invention, they would inherently have the same properties or functions. Thus, what Stein teaches does anticipate the presently claimed invention.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt
May 17, 2005

Thao Tran

**THAOT.TRAN
PATENT EXAMINER**